SCANLAF SCANSPEED

Multi-Purpose, High Speed Centrifuge

ScanSpeed 1236R/1248R

User's Manual

LaboGene ApS
Industrivej 6-8, DK-3540 Lynge
T. (+45) 3940 2566 F.(+45) 4498 1741
info@labogene.com / www.LaboGene.com

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LABOGENE

The LABOGENE's quality design that enhances performance, operation, and practicality, gives a new dimension to centrifugation

THE BEST FUNCTIONAL QUALITY

- Manufactured and tested to IEC standards, stable spining operation within +/- 2% variation
- Steady and soft deceleration with dynamic brake technology
- High capacity, strong compressor ensures fast cooling of chamber and samples
- Fast cool function 4 ℃ in 5 minutes for fast start up and fast cool down of sample
- Automatic recognition and alarms for imbalance, over-speed, and over-heat
- Automatic rotor identification functions

SAFETY and ROBUSTNESS

- Triple or double laminated ABS/Steel door construction minimized noise and heat trnasmissions
- Safety door lock mechanism ensures the door is locked whilst in operation mode
- Unique door drop protection protects the operator and samples when loading and unloading
- Automatic rotor identification secures operational safety
- Automatic detection and alarms for imbalance, excess speed and heating
- Emergency door-lock release helps to open the instrument when power blackout or suddun stoppage occurs
- The compressor-off function during door-open minimizes frosting and rusting
- The Aerosol tight buckets and rotors prevent contamination and ensures safety
- Autoclavable and corrosion resistant rotors ensure safety and long life
- High-quality cabinets with scratch resistant powder coated finished

CONVENIENCE IN OPERATION

- Intutive control pannel with easy to use
- Easy to need LCD display with bright white lettering on a blue LCD background
- Time control of pulse, timed, and continuous
- Automatic RPM/RCF conversion for prompt detection of g-force
- Easy to check actual rpm through the top window of door
- Program memory for up to 100 programs
- Automatic rotor identification function
- A large assortment of rotors, fixed angle or swing-out with buckets and adaptors

EASY CUSTOMIZATION

- Any rotors, sample containers, and adaptors can be manufactured according to customer's specification
- Flexibility of including any additional functions or porgrams in need

ECO-FRIENDLY MANUFACTURING

- Dust free AC induction motor
- Eco-safe refrigerant, R404a
- Very quiet operation at lesser than 56 dB

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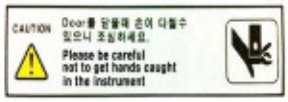
1. Meanings of Symbols & Safety Precautions

1-1. Meanings of Symbols

1-1-1. Symbols on the device

Symbol	Meaning	Symbol	Meaning
	Attention and warning.		Attention and warning for an electric shock
	Attention and warning for the rotor coupling.		Attention and warning for the door opening and closing
	Attention and warning for correct way of sample balancing in the rotor.		Attention and warning for correct way of buckets position.
	Indicate a hole for door opening in case of emergency		

1-1-2. Symbols in this document

Symbol	Meaning	Symbol	Meaning

	This symbol refers to safety relevant warnings and indicates possible dangerous outcomes.	☞	Note. This symbol refers to the important reminder.

1-2. Safety Precautions

Before using the instrument, please read this operation manual to ensure correct usage through understanding. Incorrect handling of the instrument could possibly result in personal injury or physical damage on the instrument or its accessories.

1. ALWAYS locate the instrument on a flat, rigid and stable place capable of withstanding weight of the instrument and resisting vibration.

2. ALWAYS make a safety zone of 30 cm around the centrifuge to indicate that neither hazardous materials nor persons should be permitted within the area during operation.

    ✓ ALWAYS position the instrument with additional free space on each side of instrument to ensure proper air circulation.

3. ALWAYS install the instrument within a temperature and humidity controlled environment. (Permissible ambient temperature: +5°C – +35 °C, Relative humidity: ≤ 85%)

4. Should not use a power source other than the instrument designed to operate on.

5. Should not use unapproved rotors and associated components.

    ✓ Only use rotors from LABOGENE ApS with appropriate centrifugal tubes and suitable adaptors to embrace sample containers tightly enough inside rotors.

6. Before operating the instrument, check if the rotor and the rotor lid are securely fastened.

    ✓ Should operate the instrument with a rotor properly installed and secured to the motor shaft.

7. Mount the rotor on the motor shaft properly, check it with spinning manually.

8. Do not stop the rotor by touching with hand during the instrument is running.

9. Emergency door open should be performed only when spinning is completely stopped.

10. Should not exceed the rated speed or specific gravity. Samples whose density is greater than 1.2g/ml must have reduced maximum rotational speed to avoid rotor failure.

11. The sample content should not exceed 80% of total capacity of a tube. Otherwise, it would cause

spillage of sample fluid and even the tube breakage.

12. ALWAYS load the tubes symmetrically with evenly weighted samples to avoid rotor imbalance. If necessary, use the water blank to counterbalance the unpaired sample.

13. The operation speed should not exceed the lowest value of the individual guaranteed g-forces among the centrifuge, rotor, bucket or adaptors and sample container, especially the guaranteed g-force of sample container should not be neglected.

14. The rotors should be cleaned and kept dry after every use for longer life time and safety.

15. ALWAYS disconnect the power supply prior to maintenance and servicing to avoid electrical shock.

16. ALWAYS use proven disinfection procedures after centrifuging biohazardous materials.

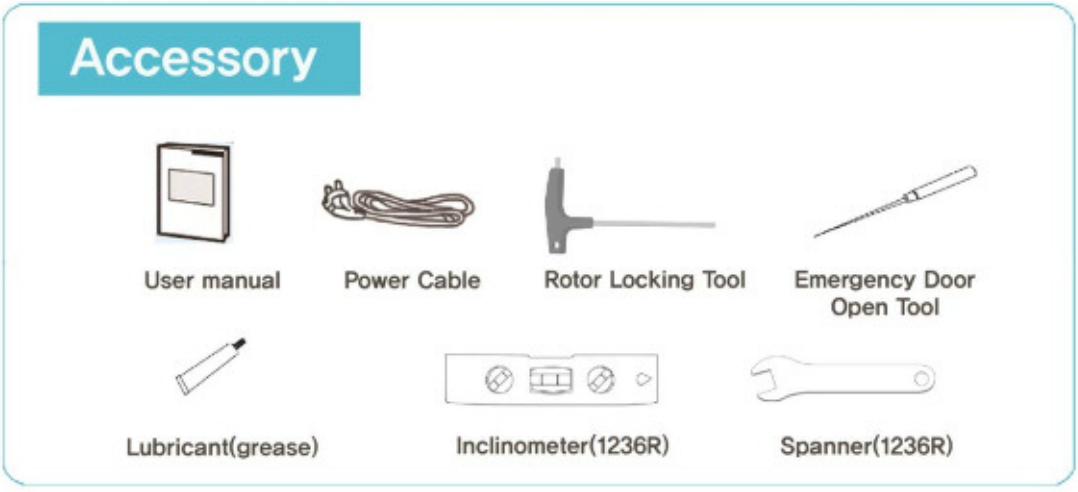
17. Should not centrifuge flammable, toxic, radioactive, explosive, or corrosive materials.

18. When it is necessary to use toxic or radioactive materials or pathogenic micro-organisms which belong to the Risk Group Ⅱ of WHO: "Laboratory Bio- safety Manual," should follow national regulations.

	✓ Do not place dangerous materials within 30cm distance around the instrument, and that is also recommended by IEC 61010-2-020. ✓ Use the emergency door open function only when the door button on the control panel is dumb under the condition of complete stop of rotor running. ✓ Never try to open or move the instrument if it is not completely stopped. ✓ If the power input is more than +/- 10% of the recommended voltage or fluctuates frequently, it may affect some functions of the instrument and often result serious damage.

2. Product Description & Technical Specifications

2-1. Product Description

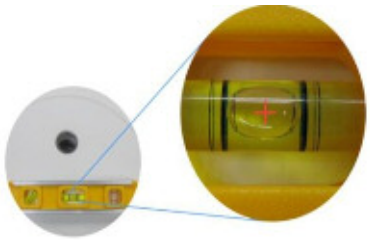


2-2. Technical Specifications

Max.RPM/RCF	Fixed angle	12,000 rpm / 16,582 xg
	Swing out	5,000 rpm / 5,394 xg
Max. capacity	Fixed angle	6 x 85 ml
	Swing out	4 x 250 ml / 250 ml conical
Temp. range(℃)		-20 ~ +40
FAST COOL button		Yes
Time control		Pulse, timed < 10 hr or continuous
RPM/RCF conversion		Yes
Noise level (dB)		≤60
Acc/Dec		5/6 steps
Program memory		100
Rotor Identification		Automation
Imbalance cutout		Yes
Display		Blue LCD
Safety lid lock		Yes
Lid drop protection		Yes
Power supply(V/Hz)		220/50~60 (110V optional)
Power requirement(VA)		2.500
Dimension(W x D x H, mm)		473 x 600 x 840 (1236R) / 655 x 620 x 357 (1248R)
Weight without rotor (Kg)		110(1236R) / 78 (1248R)
CE mark		Yes
Cat. No.		

3. Installation

3-1. Balance Adjustment (Only for 1236R)



Imbalancing of the instrument itself causes vibration, noise and error during operating. Check the level of the floor surface with an Inclinometer before installation.

Action

After locating the instrument on the solid and flat floor, check the horizontality with an Inclinometer.

1. Place the Inclinometer on top of the instrument.

   ▶ Try to locate all bubbles in the center of the Inclinometer with rotating the red gear which is in caster of the instrument.

2. Adjust the height of four–wheel, which is at the bottom of the instrument, with rotating the red gear (which is in caster of the instrument) for the first balance adjustment. (For the final balance adjustment, please refer to 3-4)
   - ➢ For tighten a wheel: rotate the red gear counterclockwise with a spanner
   - ➢ For extending a wheel: rotate the red gear clockwise with a spanner

⚠	Place the 1248R on the solid flat table. Do not place the centrifuge on the unstable place such as moving table or cart.

3-2. Power On/off and Door Release

3-2-1. Power On/off

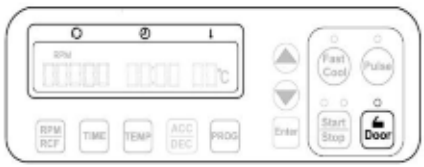
Action

1. After connecting the AC Power cord at the power socket in the right back of the instrument, turn on the Earth leakage Breaker Switch.
   - ➢ Check the proper power.

2. Turn on the instrument by pressing a switch on the right side of the instrument.
   - ➢ With beeping sound, right before setting value is displayed.
   - ➢ The default values are Max. rpm, 10 min, ACC 4, DEC 4 and 25°C.

3-2-2. Door Release

Action



1. For opening the door, touch the [DOOR] button.

   ▶ Should touch the [DOOR] button when the door is closed (Door LED shows off).

   ▶ Close the door until hearing clank shut.

   ▶ When the door is opened, the door LED turns on.

☞	✓ The door is not opened while the instrument is running. ✓ If the door is opened, the instrument is not running even with pressing the 'Start' button. ✓ For operational safety, this instrument has the automatic rotor recognition function. ✓ When you supply the power, "Searching Rotor" /"Change to Rotor ID" will be appeared. If the rotor is absent, the "Error 9" will be appeared. This message will be disappeared after rotor coupling.

	✓ Power Failure: If there is any power failure during operation, door is not opened with 'Door' button. Door can be opened only when the operation is completely stopped and the power is on again. If you want to open the door at the power failure, please refer to '4-9. Emergency Door Open'. ✓ The door is not automatically opened after finishing operation to keep the sample at proper temperature.

3-3. Rotor coupling and disassembling

Action

1. Before coupling a rotor, clean the motor shaft and chamber with soft dry towel.

Swing-Out Rotor

2. Mount the proper rotor into the motor shaft.
3. Grasp the rotor with one hand, and place rotor locking tool at the center hole of rotor.
   - To assemble the rotor: Rotate the T-tool clockwise until tightly assembled.
   - To disassemble the rotor: Rotate the T-tool counterclockwise.

4. Hang the appropriate buckets into the rotor.
   - Load the identical bucket at each wing for safety.
   - Remove dirt and water drop at the link area between the rotor and bucket for cleanness.
5. Spin the rotor manually to check the buckets swing with same angle freely. If

they do not swing freely, apply the Lubricant (grease) to the link area.

Fixed Angle Rotor

2. Mount the proper rotor into the motor shaft.

Grasp the rotor with one hand, and place rotor coupling device (T-tool) at the center hole of rotor.

- To assemble the rotor: Rotate the T-tool clockwise until tightly assembled.
- To disassemble the rotor: Rotate the T-tool counterclockwise.

3. To close of the rotor lid, rotate the rotor lid nut clockwise.

- For closing lid: rotate the rotor lid nut clockwise
- For opening lid: rotate the rotor lid nut counterclockwise.

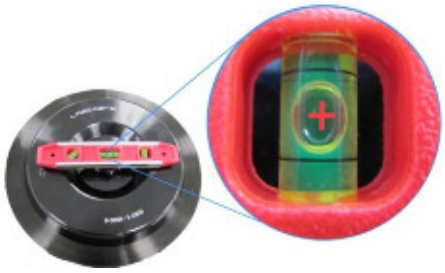
⚠	✓ When you couple the rotor at first installation, should turn off the instrument. ✓ After coupling the rotor, turn on the instrument and check the rotor recognition. ✓ When you run a fixed angle rotor, make sure that the rotor lid is tightly closed. If you don't close the rotor lid completely, it will be crushed.

☞

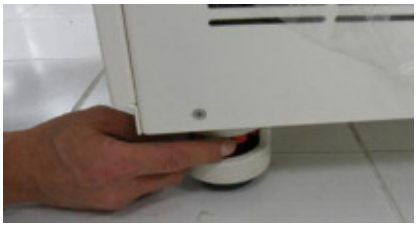
✓ For operational safety, this instrument has the automatic rotor recognition function.

3-4. Balance Adjustment – Final

1. Mount the rotor and place the balancing level on the middle of a rotor.
   ▶ Confirm that air bubbles of all three windows of the balancing level are within the black lines.



2. To adjust the balance status, rotate the red colored ring at the wheel caster clockwise or counterclockwise until the device is well balanced.

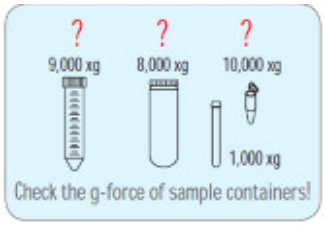


3-5. Positioning of Sample Tubes

Action

1. Before loading sample tubes, check the water drop or dirt in the rotor hole or inner bucket.
   - If there is a water drop or dirt in the rotor hole or inner bucket, remove it with soft dry cloth.
2. Tubes should be placed in the rotor with same amount of samples and symmetrical positions.
   - Only use appropriate centrifugal tubes and check the g-force of sample containers before use.
   - For safety, fill the sample for 70~80% in the tubes.

Correct Way of Sample Balancing

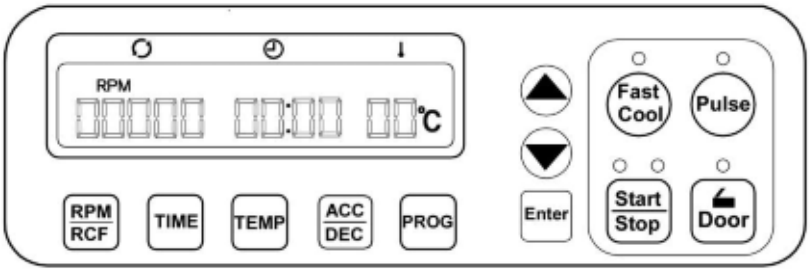


☞ If the number of samples is not pair, please load the control tubes at each symmetrical position. Otherwise, it results noise and vibration, which eventually damages the instrument.

☞ For safety, the 'Imbalance Cut Off' function will be occurred, if there is imbalance of loading tubes (Error 8, Imbalance error). Please refer to 6. Trouble Shooting.

4. Operation

4-1. Key Functions of Control Panel



☐ RPM/RCF For automatic conversion of RPM/RCF and to set the speed

☐ TIME To set time, available range up to 9 hour 59 min 59 sec (0:00:00: continuous)

☐ Temp To set temperature

☐ ACC/DEC To set the acceleration & deceleration level from 1 to 5 steps. '0' step means natural deceleration, and speed is faster for bigger numbers of steps.

☐ PROG To save a set of setting values or call the saved setting value

☐ Enter For completion of data setting

☐ Fast Cool To reach rapid refrigeration up to the setting temperature.

☐ Pulse For quick runs

☐ Start/ Stop Commend start and stop operation

☐ Door For opening instrument lid

4-2. Setting RPM/RCF

Action

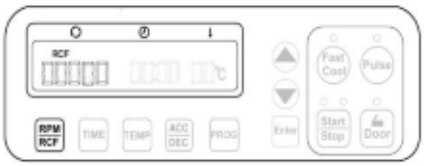
▶ Speed setting unit: 10 rpm or 100 rpm

Setting RPM

1. Touch the [RPM/RCF] button once.

   ▶ RPM MODE is generated with pressing a [RPM/RCF] button once.

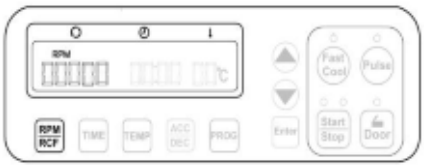
   ▶ RPM LED is flickering at the display window.



2. Touch the [▲▼] buttons to change input value.

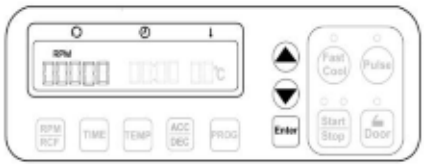
   ▶ After keeping holding finger on the [▲▼] buttons for 5 seconds, the unit of setting value is changed to 100 rpm from 10rpm.

   ▶ If you do not touch the [▲▼] button for 5 second, the setting mode is cleared.



3. Touch the [Enter] button to complete the setting.

   ▶ Press [Enter] to save the setting value.



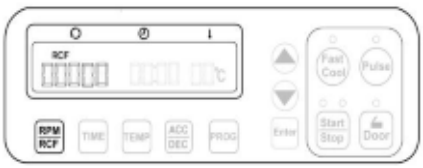
Setting RCF

▶ Speed setting unit: 1 rcf or 10 rcf

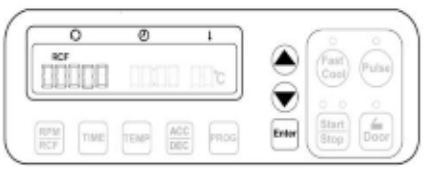
1. Touch the [RPM/RCF] button once.

   ▶ RPM MODE is generated with touching a [RPM/RCF] button once.

   ▶ RPM LED is flickering at the display window



2. Touch the [▲▼] buttons to change input value.



▶ After keeping holding finger on the [▲▼] buttons for 5 seconds, the unit of setting value is changed to 10xg from 1xg.

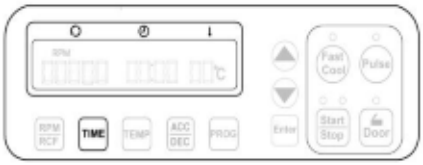
▶ If you do not touch the [▲▼] button for 5 second, the setting mode is cleared.

3. Touch the [Enter] button to complete the setting.

4-3. Setting Time

▶ Speed setting unit: 1hr./ 1min. or 10 min.

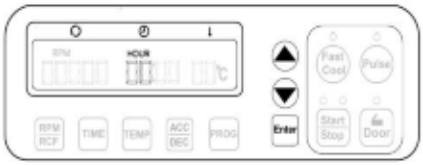
Action



✓ Time is down-counted after starting centrifugation.

1. Touch the [TIME] button once.

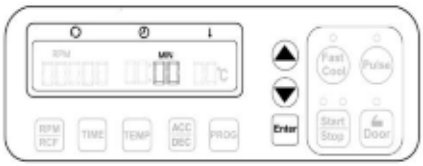
▶ 'HOUR' is appeared on the display window.



2. Touch the [▲▼] buttons to change input hour value.

▶ If you do not touch the [▲▼] button for 5 second, the setting mode is cleared.

3. Touch the [Enter] button to pass the 'MIN' value setting.



4. Touch the [▲▼] buttons to change input minute value.

▶ After keeping holding finger on the [▲▼] buttons for 5 seconds, the unit of setting value is changed to 10min from 1min.

▶ If you do not touch the [▲▼] button for 5 second, the setting mode is cleared.

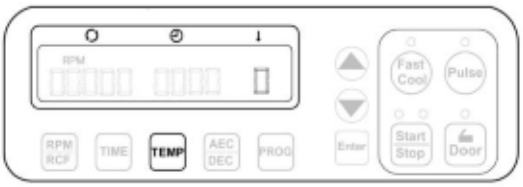
5. Touch the [Enter] button to complete the setting.

4-4. Setting Temperature and Fast Cool

4-4-1. Setting Temperature

▶ Temperature can be set from -20℃ to 40℃

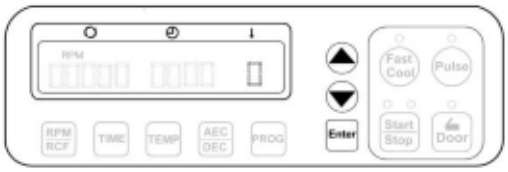
▶ Temp setting unit: 1 ℃



Action

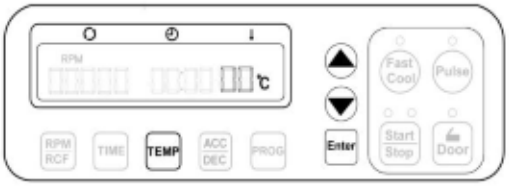
1. Touch the [TEMP] button.
   ▶ Temperature value blinks in display.

2. Touch the [▲▼] buttons to change input value.
   ▶ If you do not touch the [▲▼] button for 5 second, the setting mode is cleared.
3. Touch the [Enter] button to complete setting.

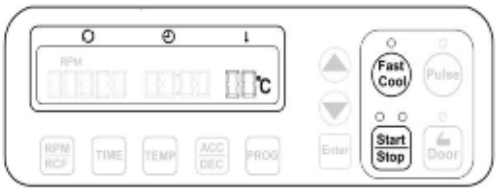


4-4-2. Fast Cool

1. Setting the temperature. (Please refer to 4-4-1. Setting Temperature)



2. Touch the [Fast Cool] buttons for fast cooling.
   ▶ 'Fast Cool' on LED is turned on.
   ▶ The display shows the message as follows: "Searching Rotor" >> "recognition OK!"
   ▶ By touching the [Fast Cool] button, the instrument is refrigerated down to the set temperature in a short time. During the fast cooling, the rotor runs at low speed (1,000 rpm).
   ▶ The passed time is showed on [Time display].



☞

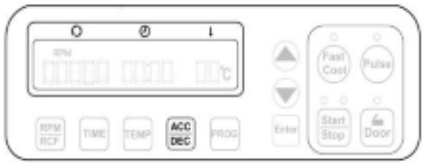
- ✓ If you'd like to load your sample tubes before pressing the [Fast Cool] button, it should be checked if the sample is safe during spinning at 1,000 rpm.
- ✓ Before starting Fast Cooling, please check the rotor coupling and symmetry of sample tube.

4-5. Acceleration / Deceleration

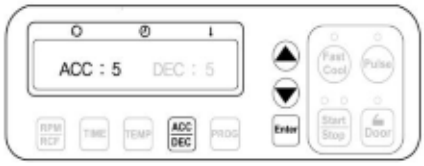
Use the adjustment function of acceleration & deceleration levels to protect sensitive samples.

Action

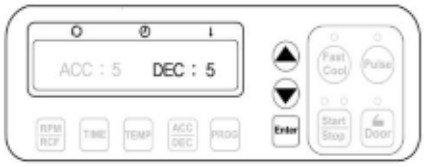
1. Touch [ACC/DEC] button.



2. Touch the [▲▼] buttons to change input ACC value.
   - ▶ ACC blinks on the ACC/DEC display.
   - ▶ Input the desired level of ACC from 1 to 5. (Level 5: The fastest acceleration)
   - ▶ If you do not touch the [▲▼] button for 5 second, the setting mode is cleared.



3. Fix the ACC level by touching [Enter] button.
4. Touch the [▲▼] buttons to change input DEC value.
   - ▶ DEC blinks on the ACC/DEC display.
   - ▶ Input the desired level of DEC from 0 to 5. (Level 0: Natural deceleration / Level 5: Fastest deceleration)
   - ▶ If you do not touch the [▲▼] button for 5 second, the setting mode is cleared.



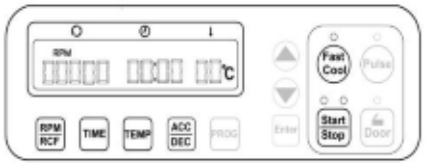
5. Fix the DEC level by touching [Enter] button.

4-6. Program Saving & Recalling

Action

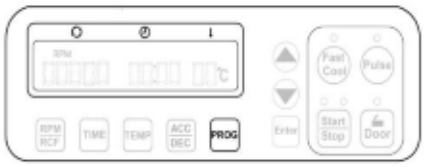
Saving

1. Set parameters. (Refer to 4-2 ~ 4-4)



2. Touch the [PROG] button longer than 3 seconds.

   ▶ Check the message of "PROGRAM SAVE: ##" at the display.

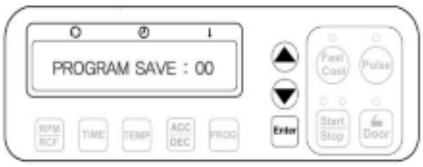


3. Touch the [▲▼] buttons to change input Program number.

   ▶ If you do not touch the [▲▼] button for 5 second, the setting mode is cleared.

   ▶ Save up to 100 programs

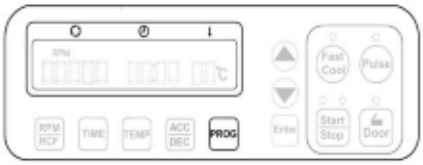
4. Touch the [Enter] button to complete the saving.



Recalling

1. To recall the saved program, just touch the [PROG] button shortly (less than 1 sec.).

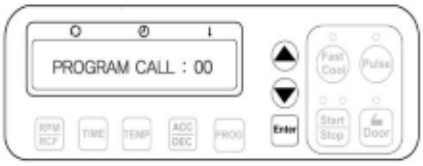
   ▶Check the message of "PROGRAM CALL: ##", at the display.



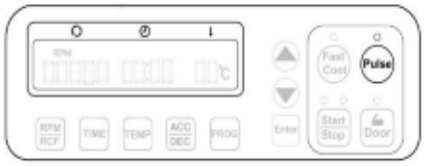
2. Touch the [▲▼] buttons to select program number you want to recall and then touch the [Enter] button.

   ▶ If you do not touch the [▲▼] button for 5 second, the setting mode is cleared.

   ▶ When you touch the [Enter] button, display window show the saved setting parameters (RPM/RCF, TIME, TEMP and ACC/DEC).



4-7. Pulse



▶ It is for quick and short spin down.

Action

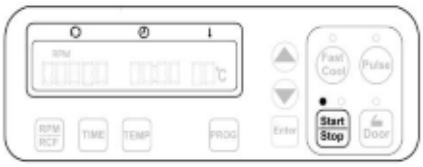
1. If you touch [Pulse] button and release at the point you want to stop after displaying 'recognition OK', the centrifuge decelerates immediately.

   ▶ If you touch [Pulse] button less than 1 seconds, the instrument is stopped after reaching the set RPM or RCF.

4-8. Start/Stop

Start

Action



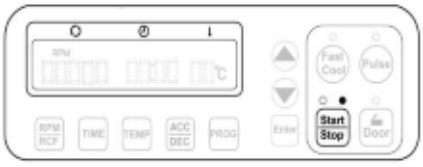
① After setting RPM/RCF, Time and Temp., touch [Start/Stop] button.

▶ During running, a 'Start LED' is turned on.

▶ The instrument is running only when the door is closed.

Stop

Action



1. In case of touching the [Start/Stop] button, the operation is stopped running.

4-9. Emergency Door Open

For emergency door open, you can use the emergency door open tool as long as the instrument is completely stopped.

The door can be unlocked manually with 5 mm T-wrench through the emergency opening hole.

1. Find the emergency hole in the front body of the instrument and take out the white rubber closure.
2. Insert the emergency open tool into the hole and push it until the door is released.

⚠	Manual opening should be performed only when spinning is completely stopped. Otherwise, harmful damage will be accompanied to not only operators but samples. After opening the door manually, it is recommended to wait until normal electricity comes back.

5. Maintenance

5-1. Outer part of instrument

1. Clean the outside of the instrument with dry soft cloth. If necessary, dip the cloth in neutral detergent and clean contaminated area. Keep completely dry after cleaning.
2. Do not use any volatile chemicals such as alcohol and benzene, etc.
3. Be careful not to make scratches on the surface of the instrument. The scratches can cause corrosion on the surface of the instrument.

✓ If any rust appears, clean it with neutral detergents and keep dry.

5-2. Chamber

1. Keep dry inside the chamber after every use.
2. If the chamber is contaminated, dip the cloth in neutral detergent and clean contaminated area.

5-3. Shaft

1. Always make special attention to clean the motor shaft to avoid any imbalance problem due to the contaminants.
2. After using the instrument, take out the rotor from the shaft, and clean the shaft with dry soft cloth to keep dry.

5-4. Rotor

1. If any parts are contaminated with samples, clean the rotor with soft wet cloth and keep the rotor dry.
2. Be careful not to make scratches inside or on the surface of rotors. Any small scratches can cause corrosion of the rotor and big damage to the instrument.
3. If you do not use the instrument, keep the rotor separately from the shaft and stand it upside down.

5-5. Transportation of the instrument

1. If you need to move or ship the instrument, be cautious to protect the shaft from any physical impact or turbulence.
2. Do not mount a rotor in any cases of movement. Fill inside the chamber with proper materials to keep the shaft on place and not to be influenced by physical pressure.

6. Trouble Shooting

6.1 Check list

Symptom	Check list
Power failure	Connect the AC Power cord and make sure that the line is completely connected between the instrument and power outlet. Check the power switch is turned on. (Please refer to 3-2. Power On/off and Door Release)
Don't run	If the door is not closed completely, the instrument can't run. Check the Door LED on the display window and close the door completely.
Can't open the door	If the power is out, check the leakage indicator to supply the power. If it is not solved in shortly, open the door with emergency door tool manually for safety of sample. (Please refer to 4-9. Emergency Door Open)
Can't close the door	Remove the dirt at the door latch and then close the door completely again.
Noise and vibration during running	If the instrument is installed on the unstable floor, please install again on the solid flat floor horizontally.
	If the rotor is not coupled appropriately, disassemble the rotor and then check the appearance of rotor. If you find the damage of rotor, immediately discard it. (Please refer to 3-3. Rotor coupling and disassembling)
	Check balances of samples in the rotor. (Please refer to 3-5. Positioning of Sample Tubes) and load the same weight of samples symmetrically.

6.2 Troubleshooting Table

If the instrument shows the error code with beeping sound, press [STOP] button to stop the beeping sound and press [Enter] button to release of the error status and make the instrument go to the default setting again.

Error	Possible Causes	Actions
Error 1	RPM Sensor	- Shut off the power supply, and then, turn on the power switch again to check the instrument. - If the error code shows continuously although you try to operate again, please contact us.
Error 2	Door	- If the door is not closed completely, this message is appeared. -Remove the dirt at the door latch and then close the door completely again. Check the Door LED on the display window. If it is not solved in shortly, open the door with emergency door tool manually for safety of sample. (Please refer to 4-9. Emergency Door Open)
Error 3	Motor Overheating	- If the motor is overheated, this message is appeared. -Shut off the power supply for an hour, and then turn on the power switch for checking the instrument. - If the error code shows continuously, please contact us.
Error 4	Low voltage	- If the power input of Power supply (V/Hz) is 10% less than required power, this message is appeared. - Shut off the power supply and then check the voltage of the Power supply (V/Hz). - Use AVR to provide proper power.
E rror5	High voltage	- If the power input of Power supply (V/Hz) is 10% more than required power, this message is appeared. - Shut off the power supply and then check the voltage of the Power supply (V/Hz). - Use AVR to provide proper power.
Error 6	Over speed	- If the instrument is spun with over speed, there will be some problems in the overload of motor and the output of motor. - Shut off the power supply, and then, turn on the power switch again to check the instrument.
Error 7	Software	- If the installed software has bugs, this message is appeared. - Tuning the firmware (Download)*

Error 8	Imbalance	- Check weight-balances of samples (Please refer to 3-5. Positioning of Sample Tubes) and then turn off and on the instrument for checking.
Error 9	Rotro ID	- If the function of rotor recognition is failed, this message is appeared. Coupling the proper rotor exactly. (Please refer to 3-3. Rotor coupling and disassembling) - Check the existence of the rotor. If the rotor is absent mount a rotor.

* Any wire disconnection or tuning of the instrument must be performed only by a service engineer who is authorized by LABOGENE ApS.

Declaration of conformity

We declare under our responsibility, that the following product:

Model: ScanSpeed 1236R Multi-Purpose Refrigerated High Speed Centrifuge

to which this declaration relates is in conformity with the following standard(s), directives or other normative document(s):

In compliance with:

EN 61010-1 - Safety requirements for electrical equipment for measurement, control and laboratory use - General requirements

EN 61010-2-020 - Safety requirements for electrical equipment, control and laboratory use - Particular requirements for laboratory centrifuges

EN 61000-6-1 - Electromagnetic compatibility - Generic immunity/emission standard

EN ISO 11201 – Acoustics – Noise emitted by machinery and equipment

Following the provisions of:

2006/42/EC - Machinery Directive, as amended

2006/95/EC - Low Voltage Directive, as amended

2004/108/EC - EMC Directive, as amended

2011/65/EU - RoHS Directive

2012/19/EU - WEEE Directive

Lynge, January 2013

Rasmus Sørensen
QA Manager
LaboGene ApS, Industrivej 6-8, Vassingerød, 3540 Lynge, Denmark

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Lynge, January 2013

Rasmus Sørensen
QA Manager
LaboGene ApS, Industrivej 6-8, Vassingerød, 3540 Lynge, Denmark

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SCANSPEED

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to which this declaration relates is in conformity with the following standard(s), directives or other normative document(s):

In compliance with:

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